WORK PLAN
FOR REMOVAL ACTION AT THE TIRE PILE/PAINT CAN SITE FORMER NANSEMOND ORDNANCE DEPOT SUFFOLK, VIRGINIA

FINAL

Prepared by

U.S. Army Corps of Engineers
Norfolk District

April 2001

Draft Prepared by:
HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

Contract No. DACA65-00-D-0019

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LIST OF ACRONYMS/ABBREVIATIONS

DoD	Department of Defense
FNOD	Former Nansemond Ordnance Depot
HRS	Hazard Ranking System
HydroGeoLogic	HydroGeoLogic, Inc.
MSW	municipal solid waste
NPL	National Priorities List
PCB	polychlorinated biphenyl
PPE	personal protective equipment
PTFE	polytetrafluoroethylene
SOW	statement of work
SVOC	semi-volatile organic compound
SSHP	site safety and health plan
TCC	Tidewater Community College
TCLP	toxicity characteristic leachate procedure
TNT	trinitrotoluene
USACE-Norfolk	U.S. Army Corps of Engineers, Norfolk District
USEPA	U.S. Environmental Protection Agency
UXO	unexploded ordnance
VDEQ	Virginia Department of Environmental Quality
VOC	volatile organic compound
WW	World War

FINAL WORK PLAN
FOR REMOVAL ACTION AT THE
TIRE PILE/PAINT CAN SITE
FORMER NANSEMOND ORDNANCE DEPOT
SUFFOLK, VIRGINIA

1.0 INTRODUCTION

HydroGeoLogic, Inc. (HydroGeoLogic) received a letter dated December 20, 1999 from the U. S. Army Corps of Engineers-Norfolk District (USACE-Norfolk). The letter requested that HydroGeoLogic submit a proposal to conduct three tasks at the former Nansemond Ordnance Depot (FNOD) in Suffolk, Virginia and included the scope of work (SOW) for three tasks. HydroGeoLogic submitted a proposal on January 4, 2000. The USACE-Norfolk issued Contract No. DACW65-00-D-0019 on January 6, 2000 authorizing HydroGeoLogic to proceed with the work outlined. This Work Plan is for one of the three tasks identified in the SOW: the removal and disposal of tires and paint cans at a site on the FNOD. The other two tasks included in the SOW are addressed in separate work plans.

The USACE-Norfolk is issuing this Work Plan in Final status. Comments from the EPA and DEQ on the draft work plan can be found in Appendix C.

1.1 TASK OBJECTIVES

The following is a list of primary objectives for this task:

- Survey the locations of the tire and paint can piles.
- Remove and dispose of the tires and paint cans.
- Collect post-removal confirmation soil samples at the locations of the tire and paint can piles.
- Apply the screening-level risk assessment to the site of the tire and paint can piles.
- Document all site activities and the results of the screening-level risk assessment in a site investigation report.

This Work Plan addresses the first two objectives above. The other three objectives will be addressed in a separate post-removal work plan for the tire and paint can piles.

1.2 SITE DESCRIPTION

This section describes the location and history of the FNOD site, the physical setting of the Tire Pile/Paint Can site, and previous environmental investigations at the site of the tire and paint can piles.

1.2.1 FNOD Site Description

The FNOD is located in Suffolk County, Virginia in the city of Suffolk and occupies 975 acres at the northwestern end of State Route 135, overlooking the Nansemond and James Rivers. It is bounded by the Nansemond River to the west, the James River to the north, Respass Beach/Holly Acres residential area to the east, Burbage and Grant communities to the southeast, and Huntersville and Wynwood communities to the south.

Today, portions of the FNOD site are occupied by the Tidewater Community College (TCC) Portsmouth Campus, Dominion Land Management, General Electric, the Hampton Roads Sanitation District, and the Virginia Department of Transportation, including a portion of Interstate 664. The FNOD was placed on the National Priorities List (NPL) in 1999 (USEPA, 1999).

1.2.2 FNOD Site History

The FNOD was obtained incrementally by the United States Army between 1917 and 1929, and was known as Pig Point Ordnance Depot until 1929. During World Wars I and II and the period in between, FNOD was used for various activities related to the preparation, processing, storage, shipment, salvage, reconditioning, and disposal of ammunition. The site reportedly handled up to 1300 tons of ammunition daily. After World War (WW) II, the facility was used for various activities including preparation of ammunition and components for permanent storage, painting and marking shells and containers, segregation of certain lots of ammunition, transference of powder charges from fiber to metal containers, salvage of munition parts, and inspection and disposal of unserviceable ammunition by defusing or burning.

FNOD was operated by the U.S. Navy as the Marine Corps Supply Forwarding Annex from 1950 to 1960, when it was declared excess. The Beazley Foundation operated a private boys military academy at the site from 1960 to 1968. Since 1960, portions of the site have also been conveyed to the various current property owners listed above. Interstate 664 was completed through the site in 1992 (USEPA, 2000).

1.2.3 Tire Pile/Paint Can Site Physical Location

The Tire Pile/Paint Can Site is located in the north central portion of FNOD, west of South Road on the TCC campus. It is in an unused area of the TCC property, accessed by depot roads through a locked gate. The area was part of the Track K line of magazines during depot operations and is currently wooded. The site consists of one area, approximately 250 feet by 100 feet, that contains various sizes of tires and a separate area to the south that contained a pile of paint and paint thinner cans. The paint can pile covered a circular area roughly 12 feet in diameter. The tires and paint cans are in distinct piles; however, additional solid waste is strewn in the woods along and off the road over the entire Track K line. This waste includes appliances, trash, and construction debris. The location of the Tire Pile/Paint Can Site is shown in Figure 1.

Attachment A contains photos of the tires as they are now and the paint cans prior to placing

them in drums as described in Section 2.1.3.2. As the photos illustrate, the tire pile contains a large number of used tires, ranging in size from automobile tires to large tractor or truck tires, randomly piled near the K-6 magazine foundation. The pile of paint cans and other small containers was located a few feet from the southern end of the tire pile.

The EPA documented that the debris accumulation occurred since Department of Defense (DoD) usage at FNOD in the Hazard Ranking System (HRS) Documentation Record for FNOD (USEPA, 1999). The dates of disposal are unknown, but must have begun after 1963, since the magazine was still present then. The piles are not evident on aerial photographs from 1968, 1972, or 1986, although by 1986 the area all around the magazine foundation appears overgrown on the aerial photographs, thus reducing visibility. The disposal, therefore, likely occurred sometime between the mid-1970s and the early 1990s.

1.2.4 Summary of Previous Environmental Investigations

Environmental investigations and removal actions have occurred at several sites at the FNOD since 1987. In 1999, FNOD was added to the EPA National Priorities List. No environmental investigations have been completed to date in the vicinity of the Tire Pile/Paint Can site.

2.0 WORK TASKS

The project will involve field activities for the removal and disposal of approximately 6,000 to 8,000 tires and approximately one-half cubic yard of used paint cans from the Tire Pile/Paint Can site. Clearing and grubbing activities will also be performed in the forested area of the Tire Pile/Paint Can site in order to improve access for equipment to the site.

The results of the removal actions will be documented in a site inspection report.

The following sections discuss the activities required to complete the removal action at the Tire Pile/Paint Can site. All activities will be completed in accordance with the appropriate local, state and federal regulations.

2.1 REMOVAL ACTION AT THE TIRE PILE/PAINT CAN SITE

The removal action at the Tire Pile/Paint Can Site will include pre-removal activities and the removal and disposal of the abandoned tires and paint cans. The sections below detail the tasks involved during each activity. All work is to be performed in a safe manner and in accordance with the Site Safety and Health Plan (SSHP).

2.1.1 Pre-Removal Activities at the Tire Pile/Paint Can Site

The following activities must be performed prior to removal and disposal of the waste materials located at the Tire Pile/Paint Can Site: unexploded ordnance (UXO) clearance, road improvements, clearing and grubbing the forested area, and survey of GPS coordinates of the boundaries of the waste area. These activities are described in the following sections. Pre-removal activities are scheduled to take approximately 5 days.

The Track K area lies at the boundary of high and medium probability areas just to the west of the TCC Lake. The probability areas have been developed by the Norfolk District archaeologist to provide an outline of areas which are more likely to contain items of historical significance. The archaeologist will review this work plan and the work itself to ensure no historically significant resources are damaged.

2.1.1.1 Unexploded Ordnance Clearance

A variety of ordnance types have been processed and disposed of at the FNOD, including trinitrotoluene (TNT), and small arms ammunition. Although most ordnance disposal occurred in landfills, disposal pits, and burning grounds, ordnance items may have been accidentally dropped at FNOD during loading and unloading activities on the depot. Experience at other ordnance depots in the U.S. has shown that stray ordnance may be found almost anywhere on depot property.

The USACE will ensure that the forested area in the vicinity of the tire pile is cleared for UXO prior to mobilization of HydroGeoLogic and HydroGeoLogic's subcontractors.

2.1.1.2 Road Improvement

There is an existing access road running near the area of the tire and paint can piles, but portions of the current access road pass through low lying wet areas which may be impassable to vehicles, especially for heavy trucks and machinery. The road will be improved by the placement of stone in the low areas so that machinery and trucks necessary for the removal and disposal of the tires can reach the work area safely.

IMS Environmental Services, a subcontractor to HydroGeoLogic, will perform the road improvements. HydroGeoLogic's Field Manager will provide oversight of the road improvements. The stone placed on the access road will be left in place following completion of the removal activities.

2.1.1.3 Clearing and Grubbing

Direct access to the piles by vehicles and machinery is not currently available. The piles are approximately 200 feet from the current access road and the area between the road and the piles is forested. The forested area will be cleared, grubbed, and improved to allow for direct access to the tires for removal and disposal. This will include a path cleared to the pile for truck and equipment access and an area cleared for placement of roll-offs. Trees will be cut at the ground surface with stumps and root systems left in place. Improvements to the forested area will include stone placement for a stable base in the disposal container area.

IMS Environmental Services will perform the clearing, grubbing and road improvements in the forested area. HydroGeoLogic's Field Manager will provide oversight of all IMS activities. The trees and brush removed during the clearing and grubbing activities will be left on-site. The stone placed in the forested area will be left in place following completion of the removal activities.

2.1.2 Surveying

The boundaries of the paint can pile and tire pile will be surveyed prior to removal using a global positioning system to at least ± 1 foot resolution. Elevation readings will be recorded if available. In addition, the locations will be field marked using stakes and flagging.

2.1.3 Removal of Tires and Paint Cans

IMS Environmental Services will remove, transport, and dispose of the tires and paint cans. Oversight will be provided by HydroGeoLogic's Field Manager and Field Technician. Modified Level D Personal Protective Equipment (PPE), as described in the SSHP, is the minmum required for these removal actions; however, the Field Manager is responsible for increasing the level of protection required if additional hazards are identified. Removal of the tires is scheduled to take approximately 10 days.

2.1.3.1 Tire Pile

The tire pile is approximately 250 feet long by 100 feet wide, varying in thickness from one to approximately six tires. The pile has been estimated by a representative of the Waste Tire Management Program of the Virginia Department of Environmental Quality (VDEQ) to contain between 6,000 and 8,000 tires (VDEQ, 2000). The tires will be taken to a recycling facility approved by the VDEQ. Transportation to the recycling facility will be provided by a conventional hauling company (i.e. not a hazardous waste hauler). Heavy equipment, such as a rubber tire backhoe, will be used to load the tires into the storage and transportation containers.

2.1.3.2 Paint Cans

All the paint cans from the pile have been packed into two drums. The cans are predominantly rusted remains of regular, cylindrical 1-gallon paint cans. There are also a few 3-gallon cans and a number of square solvent-type cans (some 1 gallon and some 5-gallon). Most of the cans in the pile appear to have been burned and are now rusted remains with no visible labels or markings.

Approximately one-half cubic yard (CY) of cans has been packed into two 85-gallon DOT-approved overpack drums. The labeled drums are currently located next to the previous disposal pile. The few paint cans with dried paint flakes remaining inside were placed in the top of the overpack drum to allow for easier access should a sample be required. The dried paint was sampled for waste characterization; however, there was not enough paint to fill the laboratory's sample size requirements. The confirmatory sampling plan for the paint can area will include at least one surficial sample from directly below the previous pile of cans. The sample will be analyzed for TCLP and direct analyses. The confirmatory sampling plan for the tire pile and paint can areas (Track K Dump) will detail the methods and sampling protocols.

The paint cans are predominately rusted remains with no free liquid. Since there is no free liquid in any of the cans, they are considered non-hazardous and will be sent to a regular (Subtitle D) landfill in accordance with RCRA policy. The two overpack drums of paint

cans will be transported to the disposal facility using a manifest provided by the facility. Transportation of the paint cans will be in accordance with DOT Hazardous Material Regulations and state and local requirements. The manifest will be completed with the USACE-Norfolk indicated as the generator of the materials and the manifest will be signed by a representative of the USACE-Norfolk. The original return copy of the manifest, signed by the operator of the disposal facility shall be furnished to HydroGeoLogic not later than 10 working days following the delivery of those materials to the facility. The original return copy of the manifest will then be provided to the USACE-Norfolk along with the report prepared for the paint can removal.

3.0 REFERENCES

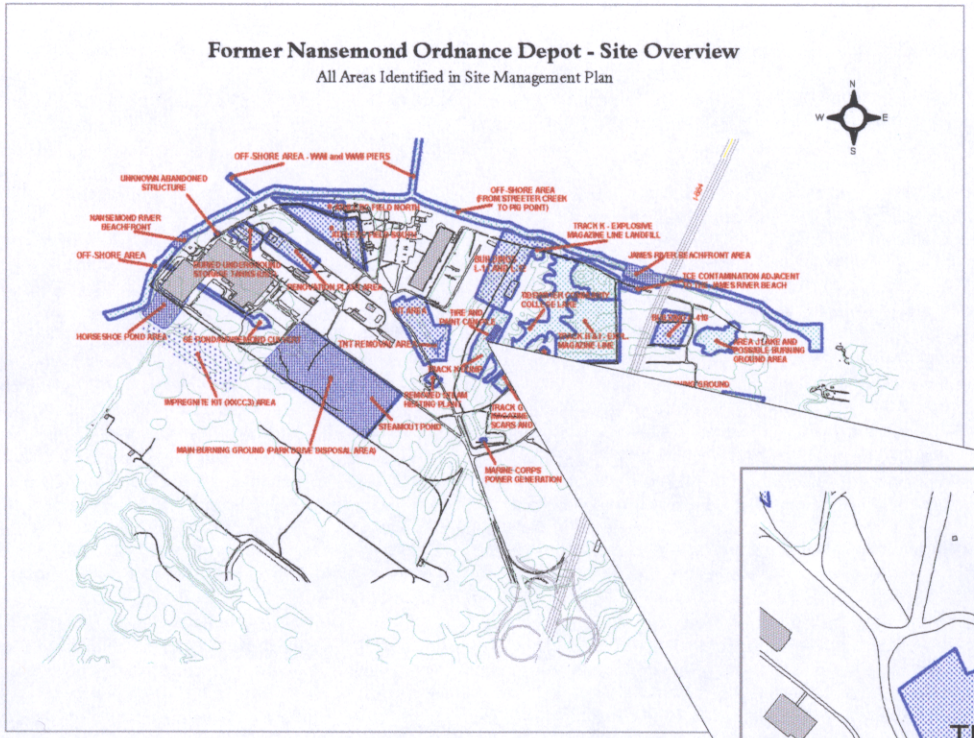
USEPA (U.S. Environmental Protection Agency), 1999, Final Hazard Ranking System Package, Former Nansemond Ordnance Depot, USEPA Region III, January, 1999.

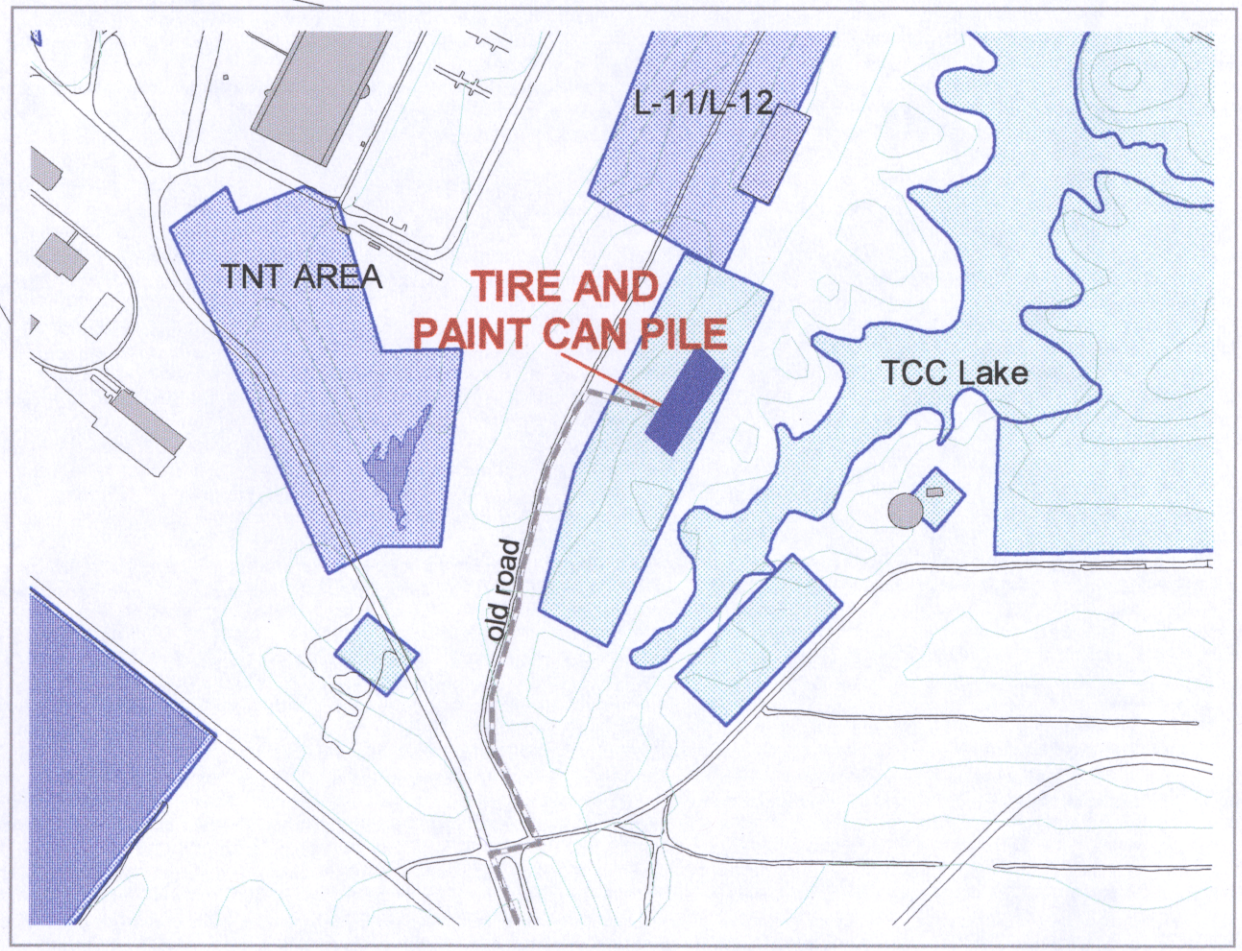
USEPA (U.S. Environmental Protection Agency), 2000, NPL Site Narrative Listing of Former Nansemond Ordnance Depot, located at Internet Site www.epa.gov, March, 2000.

VDEQ (Virginia Department of Environmental Quality), Waste Tire Management Program. Telephone communication between Shawn Priest (VDEQ) and Darrell Hollowell (HydroGeoLogic) on March 3, 2000.

Figure 1: Location of Tire Pile and Paint Cans

Figure 1: Location of Tire Pile and Paint Cans, Track K Dump





Legend

- Access Path for Tire Pile
- Buildings
- NPL Source Areas, 2001
- Removal Action Areas, 2001
- Areas of Concern

U.S. Army Corps of Engineers - Norfolk District

February 2001

ATTACHMENT A

SITE PHOTOGRAPHS

Photo 1 View of a portion of the tire pile, showing both truck and car tires

Photo 2 Close-up view of a portion of the tire pile

Filename: X:\NOR004\0101a\photos.cdr
Project No.: NOR004-0101a
Created by: cfarmer 10/27/00 cf
Revised:
Source:

Photo 3 Another view of the tire pile, showing overgrown vegetation in the area

Photo 4 View of the pile of rusting paint cans, showing its proximity to the tire pile

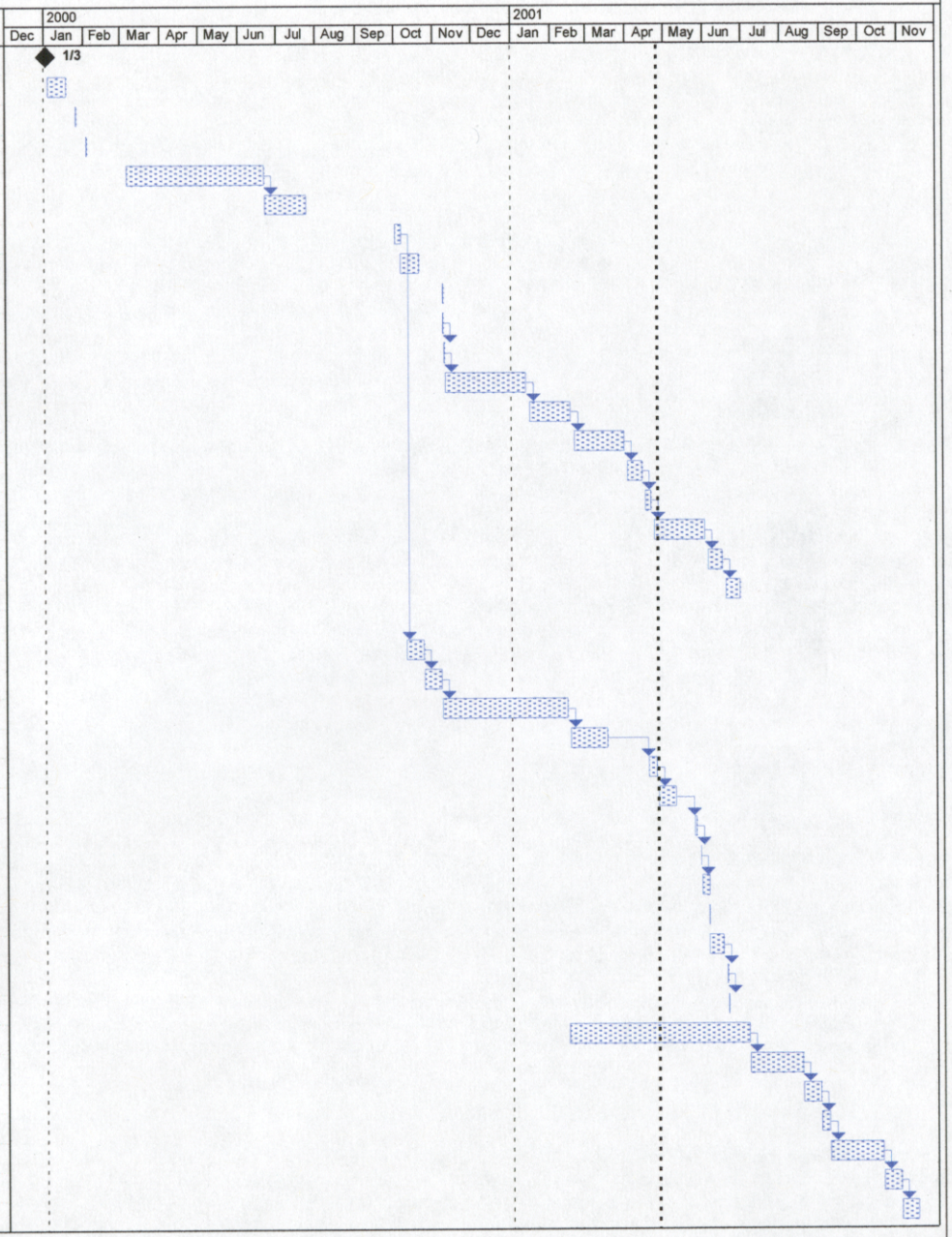
Filename: X:\NOR004\0101a\photos.cdr
Project No.: NOR004-0101a
Created by: cfarmer 10/27/00 cf
Revised:
Source:

ATTACHMENT B

Site Schedule

FNOD Pesticide Drum, Tire Pile, And Paint Can Removal Actions Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	Notice to proceed	0 days	Mon 1/3/00	Mon 1/3/00	
2	Project Set-up	10 days	Tue 1/4/00	Tue 1/18/00	
3	Kick-off meeting	1 day	Wed 1/26/00	Wed 1/26/00	
4	Site Walk	1 day	Thu 2/3/00	Thu 2/3/00	
5	Draft Pesticide Drum WP Preparation	77 days	Mon 3/6/00	Wed 6/21/00	
6	Draft Pesticide Drum WP Review By EPA and VDEQ	22 days	Thu 6/22/00	Mon 7/24/00	5
7	Pesticide Drum WP Revision	5 days	Mon 10/2/00	Fri 10/6/00	
8	Final Pesticide Drum WP Review by EPA and VDEQ	10 days	Fri 10/6/00	Fri 10/20/00	
9	Mobilization, Removal And Disposal Of Pesticide Drums (PDs)	1 day	Wed 11/8/00	Wed 11/8/00	
10	Mobilization and Bulk Package & Sample Paint Can Pile	1 day	Wed 11/8/00	Wed 11/8/00	
11	Confirmation Sampling For PDs and Demobilization	1 day	Thu 11/9/00	Thu 11/9/00	10
12	Wait On Analyses For PDs Confirmation Samples	43 days	Fri 11/10/00	Fri 1/12/01	11
13	Review analytical results.	25 days	Mon 1/15/01	Fri 2/16/01	12
14	Conduct Site Screening Process For PDs	30 days	Mon 2/19/01	Fri 3/30/01	13
15	Draft Site Investigation Report Review By USACE	10 days	Mon 4/2/01	Fri 4/13/01	14
16	Revision of Draft Site Investigation Report Per USACE Review	5 days	Mon 4/16/01	Fri 4/20/01	15
17	Draft Site Investigation Report Review By EPA and VDEQ	30 days	Mon 4/23/01	Fri 6/1/01	16
18	Site Investigation Report Revision	10 days	Mon 6/4/01	Fri 6/15/01	17
19	Final Site investigation Report Review by EPA and VDEQ	10 days	Mon 6/18/01	Fri 6/29/01	18
20					
21	Draft Tire/Paint Can Drum WP Preparation	10 days	Tue 10/10/00	Mon 10/23/00	7
22	Draft Tire/Paint Can WP Review By USACE	10 days	Tue 10/24/00	Mon 11/6/00	21
23	Revision of Draft Tire/Paint Can WP Per USACE Review	68 days	Tue 11/7/00	Tue 2/13/01	22
24	Draft Tire/Paint Can WP Review by EPA and VDEQ	21 days	Fri 2/16/01	Fri 3/16/01	23
25	Tire/Paint Can WP Revision	5 days	Wed 4/18/01	Tue 4/24/01	24
26	FinalTire/Paint Can WP Review by EPA and VDEQ	10 days	Thu 4/26/01	Wed 5/9/01	25
27	Prepare for mobilization	2 days	Thu 5/24/01	Fri 5/25/01	26
28	Road Improvement	0.5 days	Tue 5/29/01	Tue 5/29/01	27
29	Clearing, grubbing & improvements of wooded area	4.5 days	Tue 5/29/01	Mon 6/4/01	28
30	Survey	1 day	Mon 6/4/01	Mon 6/4/01	
31	Remove Tire Pile	10 days	Mon 6/4/01	Fri 6/15/01	
32	Dispose of Bulk Paint Cans	1 day	Mon 6/18/01	Mon 6/18/01	31
33	Demobilization	1 day	Tue 6/19/01	Tue 6/19/01	32
34	NOTE: Confirmation Sampling Schedule to be inserted here.	102 days	Wed 2/14/01	Thu 7/5/01	
35	Conduct Site Screening Process For Tires & Paint Cans	30 days	Fri 7/6/01	Thu 8/16/01	34
36	Draft Site Investigation Report Review By USACE	10 days	Fri 8/17/01	Thu 8/30/01	35
37	Revision of Draft Site Investigation Report Per USACE Review	5 days	Fri 8/31/01	Thu 9/6/01	36
38	Draft Site Investigation Report Review By EPA and VDEQ	30 days	Fri 9/7/01	Thu 10/18/01	37
39	Site Investigation Report Revision	10 days	Fri 10/19/01	Thu 11/1/01	38
40	Final Site investigation Report Review by EPA and VDEQ	10 days	Fri 11/2/01	Thu 11/15/01	39



Project: nansemond
Date: Wed 4/25/01

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary
External Milestone
Deadline

ATTACHMENT C

Responses to EPA and DEQ Comments on the
Draft Work Plan for Removal Action at the Tire Pile/Paint Can Site, April 2001

Attachment: Responses to Comments on the Draft Work Plan for Removal Action at the Tire Pile/Paint Can Site, April 2001

(EPA Comments from February 27, 2001)

(EPA Comment 1) Please note that the Tract K Dump is a source area listed on the National Priorities List (NPL) as part of the FNOD site. Post-removal confirmation sampling, a Proposed Plan, and a Record of Decision will be required to remove this source area from the NPL. It is understood that a Post-removal confirmation sampling Work Plan will be submitted to EPA and the Commonwealth for review and approval in the immediate future to support the effort of developing a Proposed Plan and Record of Decision for this source area.

Response:
(EPA #1) Norfolk District acknowledges that the Track K Dump was listed on the NPL and will follow all applicable procedures to proceed towards the eventual removal of the area from the NPL. The Confirmation Sampling Work Plan draft will be submitted to both agencies for review and approval

(EPA Comment 2) EPA wishes to conduct oversight activities during the performance of the removal action at the Tract K Dump. Please coordinate with Randy Grubbs of Gannett Fleming for scheduling.

Response:
(EPA #2) Norfolk District will contact Randy Grubbs Gannet Fleming with all dates. An initial email has been sent to Harry Wheeler with the estimated removal action dates.

(DEQ Comments from March 16, 2001)

Section/Page/Paragraph:

(#1) 2.1.3.1/5/1:

(#1-1) The draft work plan stated that "In the event that the recycling facility is not taking tires…they will be taken to a Municipal Solid Waste (MSW) Landfill." Should the referenced tires be transported to a MSW landfill, please state whether their ultimate fate is landfilling and/or recycling (possibly via the regional Waste Management Authority). In addition, please be cognizant of the VSWMR's, § 9 VAC 20-80-670, which states that "*More than 1,000 discarded tires shall not be stored at a solid waste management facility unless the permit for the facility expressly allows such storage. Tires disposed of in a sanitary or debris landfill shall be split, cut, or shredded before disposal…Alternate burial not incorporating cutting or splitting at a specific facility may be approved if the method will assure that tires will not emerge from the burial facility.*" Should you elect the MSW landfilling route, please consider factoring in the additional labor/materials associated with splitting tires and the labor associated with loading 12,000 to 16,000 split tire

halves. Also, a typical central Virginia MSW landfill cost for tire recycling/disposal, at a commercial rate, is ~$ 125/ton.

(#1-2) As illustrated in Attachment A - Photo 2, some tires were observed to be mounted on rims. Please be cognizant that some recycling facilities prohibit accepting tires on rims and/or limit their quantity/size.

(#1-3) In the event that any paint/solvent cans are present within the tire pile, refer to the following comments and applicable VSWMR's. Should this occurrence transpire, an identical regulatory sampling/analytical testing methodology will need to be accomplished, as stated below.

Response:
(DEQ #1-1) The tires will be recycled and not taken to an MSW landfill. Norfolk District and the contractor (HydroGeoLogic) have coordinated with the Tidewater Regional Office of DEQ for the certification of the tire pile. Shawn Priest is the point of contact that we have worked with at the TRO.
(DEQ #1-2) The tire mounted on a rim in one of the plan photos is the only tire on a rim that Keri Robertson observed the last time she went out to the tire pile site. If there are more tires on rims, Norfolk District will work with the contractor to get them removed from the rims prior to recycling.
(DEQ #1-3) Surficial soils will be sampled from at least two locations directly under the tire pile once the tires are removed. Samples will be analyzed by the TCLP method as well as analyzed directly for at least VOCs, SVOCs, Metals, Pesticides/PCBs, and explosives.

(#2) 2.1.3.2/5/1:

(2-1) The draft work plan stated that "Most cans in the pile appear…with no visible labels or markings." Based upon this observation, coupled with an insufficient quantity of paint chips for the analytical sampling analysis, you will be required to adhere to the following VSWMR's. According to § 9 VAC 20-80-700 F. "*The soil contaminated as a result of anything other than leakage from an underground storage tank shall be tested by the Toxicity Characteristic Leachate Procedure (TCLP).*" In addition, § 9 VAC 20-80-700 D.1 states that "*Soils failing the…TCLP test shall be managed in accordance with the Virginia Hazardous Waste Regulations*"(VR 672-10-1).

Note: Should the composite soil(s) sample fail the TCLP analytical test, please contact me in a timely manner, if you require any assistance.

(2-2) Based upon the size of the paint/solvent can pile, this office makes the assertion that the volume of contaminated soil (if present) would most likely be less than 20 cubic yards. Therefore, § 9 VAC 20-80-700 E.1 would be applied to this assertion. This VSWMR states that "*Contaminated soil resulting from an underground storage tank release or from a spill may be considered for an exemption from the limits specified in § 9 VAC 20-80-700 D where the total volume of contaminated soil from a cleanup site is less than 20 cubic yards, and the contaminated soil is not a hazardous waste.*" Should non-hazardous contaminated soil (if present) be evaluated against this regulatory clean fill scenario (*§ 9 VAC 20-80-700 D.6)*, then risk to both human health and the environment would also need to be studied/evaluated.

(2-3) Due to the VSWMR's stated above, please incorporate the mandatory TCLP soil analytical test in this section narrative. It is recommended that one surficial composite soil sample be collected from beneath the footprint of the paint/solvent can pile. If present/observed, record any evidence of stained soil(s) beneath the referenced pile and/or any contiguous stressed vegetation.

Response:
(DEQ #2-1) Norfolk District believes that the "volume of contaminated soil (if present) would most likely be less than 20 cubic yards." Surficial soil will be sampled from beneath the center of the paint can area and will be tested by the TCLP method to presumably confirm the soil is non-hazardous. Should test results prove otherwise, Norfolk District will notify DEQ immediately.
(DEQ #2-2) Agree - Norfolk District will evaluate the risks at the area if sampling results warrant.
(DEQ# 2-3) TCLP analysis will be included in the sampling plan for the site and the sample will be collected as indicated.

ADDITIONAL ATTACHMENTS
(NOT IN TABLE OF CONTENTS)

1. Cover Letter to EPA and DEQ
2. Copies of original review letters by EPA and DEQ
3. Copy of the public notice, 25 April 2001

DEPARTMENT OF THE ARMY
NORFOLK DISTRICT, CORPS OF ENGINEERS
FORT NORFOLK, 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

REPLY TO
ATTENTION OF:

Kenneth Hafner, Project Manager

April 24, 2001

Robert Thomson
Mail Code 3HS13
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Eric Salopek
Virginia Department of Environmental Quality
Office of Remediation Programs
629 E. Main Street
Richmond, VA 23219

RE: Work Plan for Removal Action at the Tire Pile/Paint Can Site
Former Nansemond Ordnance Depot, Suffolk, VA
April 2001

Dear Sirs:

Enclosed are copies of the subject work plan as a final document. Copies of comments received from EPA and DEQ, as well as the Corps responses to the comments are included as Appendix C to the document. The responses to the comments are also attached to this letter for your review.

The plan has been delivered to the Tidewater Community College Portsmouth Campus Library to be available to the interested public. The Norfolk District is publishing a public notice for the removal action and availability of documents on Wednesday, April 25, 2001 in the Virginian-Pilot and the Sun Herald. This public notice will also be published on the FNOD project and the Norfolk District USACE web pages. The Norfolk District will issue a separate confirmatory sampling plan for the area as previously discussed to satisfy all regulatory requirements.

Your quick response time on the draft plan was greatly appreciated. If you have further comments on the Work Plan for Removal Action at the Tire Pile/Paint Can Site, please

them to Ken Hafner at the Norfolk District. If you require any further clarification, please feel free to e-mail or call Keri Robertson at 757-441-7727 or 757-472-0886 (cell).

Sincerely,

Kenneth W. Hafner
Norfolk District Project Manager

Encl:
2 Copies Plan to Eric Salopek
2 Copies Plan to Rob Thomson

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Robert Thomson, P.E.
Hazardous Sites

Direct Dial (215) 814-3357
Mail Code: 3HS13

Date: February 27, 2001

Mr. Kenneth W. Hafner
U.S. Army Corps of Engineers - Norfolk District
Attention: CENAO-PM-M
803 Front Street
Norfolk, Virginia 23510-1096

Re: Former Nansemond Ordnance Depot, Va.
Tract K Dump
Review of draft *Work Plan*

Dear Mr. Hafner:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corp's of Engineers (Corp's) February,2001 draft *Work Plan* pertaining to the tire pile/paint can removal action at the Tract K Dump, located on the former Nansemond Ordnance Depot (FNOD). Based upon that review, please find our comments pertaining to the draft removal action *Work Plan*:

1. Please note that the Tract K Dump is a source area listed on the National Priorities List (NPL) as part of the FNOD site. Post-removal confirmation sampling, a Proposed Plan, and a Record of Decision will be required to remove this source area from the NPL. It is understood that a Post-removal confirmation sampling Work Plan will be submitted to EPA and the Commonwealth for review and approval in the immediate future to support the effort of developing a Proposed Plan and Record of Decision for this source area.

2. EPA wishes to conduct oversight activities during the performance of the removal action at the Tract K Dump. Please coordinate with Randy Grubbs of Gannett Fleming for scheduling.

Based upon our review of the Corp's February, 2001 draft *Work Plan* for the performance of a removal action at the Tract K Dump, EPA finds the draft *Work Plan* to be acceptable. Please send two copies of the final *Work Plan* to EPA for insertion into the EPA administrative record for this site. It is understood from the draft *Work Plan* that mobilization for the removal action will begin on or about **April 9, 2001**. Please let EPA know if the mobilization date changes significantly for this removal action.

If you have any questions, please feel free to call me at (215) 814-3357,

Sincerely,

Robert Thomson, PE
Hazardous Sites (3HS13)

cc: Eric Salopek (VaDEQ, Richmond)
Pat Genzler, Esq. (Vandeventer Black, Norfolk)

March 19, 2001

Mr. Kenneth W. Hafner
U. S. Army Corps of Engineers – Norfolk District
Attention: CENAO-PM-M
803 Front Street
Norfolk, Virginia 23510-1096

RE: Former Nansemond Ordinance Depot - Suffolk, Virginia
Review of *Draft Work Plan for Removal Action at the Tire Pile/Paint Can Site*

Dear Mr. Hafner:

Thank you for providing the Department of Environmental Quality - Office of Remediation Programs, the opportunity to review the referenced draft FNOD work plan of February 2001. Detailed below, please find the Department of Environmental Quality's comments and concerns on the referenced draft work plan.

Section/Page/Paragraph:

2.1.3.1/5/1:

The draft work plan stated that "In the event that the recycling facility is not taking tires…they will be taken to a Municipal Solid Waste (MSW) Landfill." Should the referenced tires be transported to a MSW landfill, please state whether their ultimate fate is landfilling and/or recycling (possibly via the regional Waste Management Authority). In addition, please be cognizant of the VSWMR's, § 9 VAC 20-80-670, which states that "*More than 1,000 discarded tires shall not be stored at a solid waste management facility unless the permit for the facility expressly allows such storage. Tires disposed of in a sanitary or debris landfill shall be split, cut, or shredded before disposal…Alternate burial not incorporating cutting or splitting at a specific facility may be approved if the method will assure that tires will not emerge from the burial facility.*" Should you elect the MSW landfilling route, please consider factoring in the additional labor/materials associated with splitting tires and the labor associated with loading 12,000 to 16,000 split tire halves. Also, a typical central Virginia MSW landfill cost for tire recycling/disposal, at a commercial rate, is ~$ 125/ton.

As illustrated in Attachment A - Photo 2, some tires were observed to be mounted on rims. Please be cognizant that some recycling facilities prohibit accepting tires on rims and/or limit their quantity/size.

In the event that any paint/solvent cans are present within the tire pile, refer to the following comments and applicable VSWMR's. Should this occurrence transpire, an identical regulatory sampling/analytical testing methodology will need to be accomplished, as stated below.

2.1.3.2/5/1:

The draft work plan stated that "Most cans in the pile appear…with no visible labels or markings." Based upon this observation, coupled with an insufficient quantity of paint chips for the analytical sampling analysis, you will be required to adhere to the following VSWMR's. According to § 9 VAC 20-80-700 F. *"The soil contaminated as a result of anything other than leakage from an underground storage tank shall be tested by the Toxicity Characteristic Leachate Procedure (TCLP)."* In addition, § 9 VAC 20-80-700 D.1 states that *"Soils failing the…TCLP test shall be managed in accordance with the Virginia Hazardous Waste Regulations"* (VR 672-10-1).

Note: Should the composite soil(s) sample fail the TCLP analytical test, please contact me in a timely manner, if you require any assistance.

Based upon the size of the paint/solvent can pile, this office makes the assertion that the volume of contaminated soil (if present) would most likely be less than 20 cubic yards. Therefore, § 9 VAC 20-80-700 E.1 would be applied to this assertion. This VSWMR states that *"Contaminated soil resulting from an underground storage tank release or from a spill may be considered for an exemption from the limits specified in § 9 VAC 20-80-700 D where the total volume of contaminated soil from a cleanup site is less than 20 cubic yards, and the contaminated soil is not a hazardous waste."* Should non-hazardous contaminated soil (if present) be evaluated against this regulatory clean fill scenario (*§ 9 VAC 20-80-700 D.6)*, then risk to both human health and the environment would also need to be studied/evaluated.

Due to the VSWMR's stated above, please incorporate the mandatory TCLP soil analytical test in this section narrative. It is recommended that one surficial composite soil sample be collected from beneath the footprint of the paint/solvent can pile. If present/observed, record any evidence of stained soil(s) beneath the referenced pile and/or any contiguous stressed vegetation.

Should you have any questions and/or comments please contact me @ (804) 698-4427. Thank you for your continued assistance and cooperation with regard to the FNOD facility.

Sincerely,

Eric J. Salopek
Project Manager
Office of Remediation Programs

Cc: Durwood Willis; DEQ-ORP
Milton L. Johnston; DEQ-TRO
Robert Thomson, PE; USEPA (3HS13)

PUBLIC NOTICE

INTENT TO REMOVE AND DISPOSE OF WASTE TIRES

The US Army Corps of Engineers (USACE) plans to remove and recycle waste tires located at the FORMER NANSEMOND ORDNANCE DEPOT, SUFFOLK, VIRGINIA. The tires are on land currently owned by the Virginia Department of Community Colleges.

A work plan for the removal action is available for public review at the Tidewater Community College, Portsmouth Campus library.

Comments may be mailed to:

USACE, Norfolk District
Attn: Ms. Keri L. Robertson
803 Front Street
Norfolk, VA 23510-1096

E-mail comments may be sent to:
Keri.L.Robertson@usace.army.mil

All written comments received by May 25 regarding the Removal Action will be reviewed, and a public meeting will be held if there is significant public interest. Work will start on or after May 29, 2001.